



The City of San Diego Development Services

## **Technical Policy** P-4-1

**Subject:** Minimum Plumbing Fixtures

**Code Edition:** 2001 California Plumbing Code

Code Section: CPC Section 413
Issue Date: May 1, 2003

**Approved By:** Signed Copy on File

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The City of San Diego has revised the SD Municipal Code when adopting the 2001 California Plumbing Code to comply with State law and enforces the minimum plumbing fixture requirements in Section 413 and Table 4-1 of the CPC. The city of San Diego adopted the 2001 California Plumbing Code (CPC) on November 1, 2002.

The CPC requires use of Table 4-1 for calculating the minimum required number of plumbing fixtures for all new structures, additions, and tenant improvements. In an effort to further clarify and simplify the process of determinating the required number of plumbing fixtures, Table 4-1 has been expanded to include an 'Occupancy Load Factor' for each type of building as well as building categories not shown in Table 4-1 of the CPC. The expanded table is referred to as Table 4-1-SD and items shown in *blue italics* are unique to the expanded table .

TABLE 4-1-SD Minimum Plumbing Facilities

Type of Building	Occupancy	Water Closets 14	Urinals	Lavatories	Bathtubs or Showers Drinking Fount. 3, 13
or Occupancy 2, 18	Load Factor	(Fixtures per Person)	(Fixtures per Person)	(Fixtures per Person)	(Fixtures per Person) (Fixtures per Person)
Assembly Places  Theatres, Auditoriums, Convention halls, etc for permanent employee use	200	Male Female 1:1-15 1:1-15 2:16-35 3:16-35 3:36-55 4:36-55  Over 55, add 1 fixture for each additional 40 persons.	Male 0:1-9 1:10-50 Add one fixture for each additional 50 males	Male Female 1 per 40 1 per 40	
Assembly Places - Theatres, Auditoriums, Convention Halls, etc for public use	30	Male Female 1:1-100 3:1-50 2:101-200 4:51- 100 3:201-400 8:101- 200 11:201- 400 Over 400, add one fixture for each additional 500 males and 1 for each additional 125 females.	Male 1:1-100 2:101-200 3:201-400 4:401-600 Over 600 add 1 fixture for each additional 300 males.	Male Female 1:1-200 1:1-200 2:201-400 2:201- 400 3:401-750 3:401- 750  Over 750, add one fixture for each additional 500 persons	1:1-150 2:151-400 3:401-750 Over 750, add one fixture for each additional 500 persons.

Dormitories <sup>9</sup> School or Labor	200	Male Female 1 per 10 1 per 8 Add 1 fixture for each additional 25 males (over 10) and 1 for each additional 20 females (over 8)	Male 1 per 25 Over 150, add 1 fixture for each additional 50 males	Male Female 1 per 12 1 per 12 Over 12 add one fixture for each additional 20 males and 1 for each 15 additional females	1 per 8  For females, add 1 bathtub per 30. Over 150, add 1 per 20	1 per 150 <sup>12</sup>
Dormitories - for staff use	200	Male Female 1:1-15 1:1-15 2:16-35 3:16-35 3:36-55 4:36-55 Over 55, add 1 fixture for each additional 40 persons	Male 1 per 50	Male Female 1 per 40 1 per 40	1 per 8	
Dwellings <sup>4</sup> Single Dwelling MultipleDwelling or Apartment House	300 200	1 per dwelling 1 per dwelling or apartment unit		1 per dwelling 1 per dwelling or apartment unit	1 per dwelling 1 per dwelling or apartment unit	
Hospital Waiting Rooms	200	1 per room		1 per room		1 per 150 <sup>12</sup>
Hospitals - for employee use	200	Male Female 1:1-15 1:1-15 2:16-35 3:16- 35 3:36-55 4:36- 55  Over 55, add 1 fixture for each additional 40 persons	Male 0:1-9 1:10-50 Add one fixture for each additional 50 males			
Hospitals - Individual Room Ward Room	200	1 per room 1 per 8 patients		1 per room 1 per 10 patients	1 per room 1 per 20 patients	1 per 150 <sup>12</sup>

Industrial <sup>6</sup> Warehouses, Workshops, Foundries and similar establishments - for employee use	5,000	Male Female 1:1-10 1:1-10 2:11-25 2:11- 25 3:26-50 3:26- 50 4:51-75 4:51- 75 5:76-100 5:76- 100  Over 100, add 1 fixture for each additional 30 persons		Up to 100, 1 per 10 persons  Over 100, 1 per 15 persons <sup>7,8</sup>	1 shower for each 15 persons exposed to excessive heat or to skin contaminati on with poisonous, infectious, or irritating material	1 per 150 <sup>12</sup>
Institutional - Other than Hospitals or Penal Institutions (on each occupied floor)	200	Male Female 1 per 25 1 per 20	Male 0:1-9 1:10-50 Add one fixture for each additional 50 males	Male Female 1 per 10 1 per 10	1 per 8	1 per 150 <sup>12</sup>
Institutional - Other than Hospitals or Penal Institutions (on each occupied floor) - for employee use	200	Male Female 1:1-15 1:1- 15 2:16-35 3:36-55 3:36-55 4:36- 55 Over 55, add 1 fixture for each additional 40 persons	Male 0:1-9 1:10-50 Add one fixture for each additional 50 males	Male Female 1 per 40 1 per 40	1 per 8	1 per 150 <sup>12</sup>
Office or Public Buildings	200	Male Female 1:1-100 3:1-50 2:101-200 4:51- 100 3:201-400 8:101- 200 11:201- 400 Over 400, add one fixture for each additional 500 males and 1 for each additional 150 females	Male 1:1-100 2:101-200 3:201-400 4:401-600  Over 600, add 1 fixture for each additional 300 males	Male Female 1:1-200 1:1-200 2:201-400 2:201- 400 3:401-750 3:401- 750 Over 750, add one fixture for each additional 500 persons		1 per 150 <sup>12</sup>

Office or Public Buildings - for employee use	200	Male Female 1:1-15 1:1-15 2:16-35 3:16- 35 3:36-55 4:36- 55  Over 55, add 1 fixture for each additional 40 persons	Male 0:1-9 1:10-50 Add one fixture for each additional 50 males	Male Female 1 per 40 1 per 40		
Penal Institutions- for employee use	200	Male Female 1:1-15 1:1- 15 2:16-35 3:36-55 3:36-55 4:36- 55  Over 55, add 1 fixture for each additional 40 persons	Male 0:1-9 1:10-50 Add one fixture for each additional 50 males	Male Female 1 per 40 1 per 40		1 per 150 <sup>12</sup>
Penal Institutions- for prison use Cell Exercise Room Exercise Area	200	1 per cell 1 per exercise room 1 per 20	Male 1 per exercise room	1 per cell 1 per exercise room 1 per 20	1 per 16	1 per cell block fl. 1 per exercise rm. Access to drinking fountain
Agricultural Buildings Milking Barns Meat & Poultry Inspection Bldg.	5,000	At least 1 Male Female 1:1-15 1:1- 15 2:16-35 2:16-35 3:36-55 3:36-55 4:56-80 4:56-80 1 for each additional 30 persons in excess of 80		At least 1		
School of Cosmetology	50	Male Female *At least 1 *At least 2		At least 1		

Cosmetological Establishments	200	Male Female *At least 1 *At least 1				
Health Facilities and Clinics Waiting Room  For Patient Use  For Employee Use Including Locker Room	200	Male Female  1 per room  1 per 6 patients  1:1-15	1 per 50	Male Female  1 per 8 patients  1 per 40 1 per 40	1 per 12 patients	1 per 75 <sup>12</sup> 1 per nursing unit
Board of Corrections - Juvenile Halls Camp	200	1 per 6 1 per 10		1 per 6 1 per 10	1 per 6 1 per 7	Access to fountain Access to fountain
Board of Corrections - Local Detention Facilities Locked Sleeping Rooms	200	1 per 8 1		1 per 8 1	1 per 20	
Restaurants, Pubs, and Lounges	30	Male Female 1;1-50 1:1-50 2:51-150 2:51- 150 3:151-300 4:151- 300 Over 300, add 1 fixture for each additional 200 persons	Male 1:1-150  Over 150, add 1 fixture for each additional 150 males	Male Female 1:1-150 1:1-150 2:151-200 2:151- 200 3:201-400 3:201- 400 Over 400, add 1 fixture for each additional 400 persons		

Schools - for staff use All schools	50	Male Female 1:1-15 1:1-15 2:16-35 2:16-35 3:36-55 3:36-55 Over 55, add 1 fixture for each additional 40 persons	Male 1 per 50	Male Female 1 per 40 1 per 40		
Schools - for student use Nursery  Elementary Secondary Others (Colleges, Universities, Adult Centers, etc.)	50	Male Female  1:1-20 1:1-20 2:21-50 2:21-50 Over 50, add 1 fixture for each additional 50 persons 1 per 30 1 per 25  1 per 40 1 per 30  1 per 40 1 per 30	Male  1 per 75 1 per 35 1 per 35	Male Female  1:1-25		1 per 150 <sup>12</sup> 1 per 150 <sup>12</sup> 1 per 150 <sup>12</sup> 1 per 150 <sup>12</sup>
Worship Places - Educational and Activities Unit	30	Male Female 1 per 150 1 per 75	Male 1 per 150	1 per 2 water closets		1 per 150 <sup>12</sup>
Worship Places - Assembly Place	30	Male Female 1 per 150 1 per 75	Male 1 per 150	1 per 2 water closets		1 per 150 <sup>12</sup>
Retail or Wholesale Stores - <sup>19</sup>	200	Male Female 1:1-100 1:1-100 2:101-200 2:101- 200 3:201-400 3:201- 400  Over 400, add one fixture for each additional 200 males or females	Male 0:0-9 1:10-100 2:101-200 3:201-400 Over 400, add one fixture for each additional 200 males	Male Female 1:1-200 1:1- 200  Over 200, add 1 fixture for each additional 400 persons		
Fitness Center Gym Weight Room	50	Male Female 1:1-50 1:1-50 2:51-100 2:51-100  Over 100, add one fixture for each additional 100 males or 50 females	Male 1:1-100 Over 100, add one fixture for each additional 100 males	Male Female 1:1-50 1:1-50 2:51-100 2:51- 100  Over 100, add one fixture for each additional 100 males or females	1 per 20	1 per 150

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Nightclubs, Music and/or Dancing establishments <sup>17</sup>	15	Male Female 1;1-50 1:1-50 2:51-150 2:51- 150 3:151-300 4:151- 300  Over 300, add 1 fixture for each additional 200 persons	Male 1:1-150  Over 150, add 1 fixture for each additional 150 males	Male Female 1:1-150 1:1-150 2:151-200 2:151- 200 3:201-400 3:201- 400  Over 400, add 1 fixture for each additional 400 persons		
Coffee Shops, Deli, and similar small food and beverage establishments with a net floor area of 1,200sf or less 17,19	30	Male Female 1:1-20 1:1-20  Over 20, use "Restaurants, Pubs and Lounges"		Male Female 1:1-20 1:1-20  Over 20, use "Restaurants, Pubs and Lounges"		
Congregate residences	200	Male Female 1 per 10 1 per 8  Add one fixture for each additional 25 males and one for each additional 20 females		Male Female 1 per 12 1 per 12  Over 12, add one fixture for each additional 20 males and one for each additional 15 females	I per 8  For females, add one bathtub per 30. Over 150, add one per 20	
Art Gallery, Museum	50	Male Female 1:1-20 1:1-20 2:21-50 2:21- 50 Add one fixture for each additional 50 males or females	0:1-50 1:51-100 Over 100, add one fixture for each additional 100 males	Male Female 1 per 50 1 per 50		

### Footnotes:

- 1. The figures shown are based upon one (1) fixture being the minimum required for the number of persons indicated or any fraction thereof.
- 2. Building categories not shown on this table shall be considered separately by the Administrative Authority.
- 3. Drinking fountains shall not be installed in toilet rooms.
- 4. Laundry trays. One (1) laundry tray or one (1) automatic washer standpipe for each dwelling unit or one (1) laundry tray or one (1) automatic washer standpipe, or combination thereof, for each twelve (12) apartments. Kitchen sinks, one (1) for each dwelling or apartment unit.
- 5. For each urinal added in excess of the minimum required, one water closet may be deducted. The number of water closets shall not be reduced to less than two-thirds (2/3) of the minimum requirement.
- 6. As required by ANSI Z4.1-1986, Sanitation in Places of Employment.
- 7. Where there is exposure to skin contamination with poisonous, infectious, or irritating materials, provide one (1) lavatory for

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each five (5) persons.

- 8. Twenty-four (24) lineal inches (610 mm) of wash sink or eighteen (18) inches (457 mm) of a Circular basin, when provided with water outlets for such space, shall be considered equivalent to one (1) lavatory.
- 9. Laundry trays, one (1) for each fifty (50) persons. Service sinks, one (1) for each hundred (100) persons.
- General. In applying this schedule of facilities, consideration shall be given to the accessibility of the fixtures. Conformity purely on a numerical basis may not result in an installation suited to the need of the individual establishment. For example, schools should be provided with toilet facilities on each floor having classrooms.
  - a. Surrounding materials, wall and floor space to a point two (2) feet (610 mm) in front of urinal lip and four (4) feet (1219 mm) above the floor, and at least two (2) feet (610 mm) to each side of the urinal shall be lined with non-absorbent materials.
  - b. Trough urinals shall be prohibited.
- 11. A restaurant is defined as a business which sells food to be consumed on the premises.
  - a. The number of occupants for a drive-in restaurant shall be considered as equal to the number of parking stalls.
  - b. Employee toilet facilities shall not be included in the above restaurant requirements. Hand washing facilities shall be available in the kitchen for employees.
- Where food is consumed indoors, water stations may be substituted for drinking fountains. Offices, or public buildings for use by more than six (6) persons shall have one (1) drinking fountain for the first one hundred fifty (150) persons and one (1) additional fountain for each three hundred (300) persons thereafter.
- 13. There shall be a minimum of one (1) drinking fountain per occupied floor in schools, theatres, auditoriums, dormitories, offices or public building.
- 14. The total number of water closets for females shall be at least equal to the total number of water closets and urinals required for males.
- 15. Fixtures need not to be located within the locked room provided a communication system or procedure is in effect to give the minor immediate access to a lavatory, toilet and drinking fountain.
- 16. Fixtures serving individual patient rooms shall not be considered as meeting the required rates for bedrooms not served by individual adjoining toilets or bathrooms.
- 17. Restaurants, Pubs and Lounges, Nightclubs, Coffee Shops, Deli and similar food or beverage serving establishments may use net area. These establishments may deduct non-customer space such as counter areas, stairways, storage rooms, existing bathrooms, kitchens, etc. from total area to determine net area.
- 18. In occupancies serving 10 or fewer people, one toilet facility, designed for use by no more than one person at a time, shall be permitted for use by both sexes.
- 19. In business and mercantile occupancies with a total floor area of fifteen hundred (1500) square feet or less, one toilet facility, designed for use by no more than one person at a time, shall satisfy the requirements for serving customers and employees of both sexes.

#### Notes to 4-1-SD:

Alterations without an increase in occupant load which are not a change in occupancy classification maintain their existing non-conforming rights.

#### Number of Fixtures per Floor

Section 413.2.1 of the CPC requires, in multi-story buildings, the availability of the required plumbing fixtures shall not exceed one vertical story.

Fixtures shall be provided on each floor based on the number of occupants on each floor or provided for each group of floors based on the occupants for that group of floors.

#### Floors serving customers and employees

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Section 413.5.2 requires fixtures be provided for customer use. Section 413.5.1 of the CPC allows a single set of restrooms accessible to both customers and employees. The required number of fixtures shall be the greater of the required number for employees or the required number for customers.

#### Location of Fixtures

Access to public restroom facilities (for the customer) shall be unrestricted, even when through areas designated "For Employee Use Only".

#### Accessibility Requirements for Persons with Disabilities

Per the California Building Code.

#### Categories not shown in Tables 4-1, 4-2, 4-3, and 4-4

Section 413.4.3 of the CPC allows for categories not shown in the table to be determined by the Building Official on a case-by-case basis.

#### Shell Buildings

Developer must identify the proposed use on the plans. The number of facilities shall be based on the proposed use. A minimum of one men\*s and one women\*s toilet room shall be provided. Additional fixtures do not need to be installed prior to tenant improvement.

#### **Mixed Occupancies**

Where mixed occupancies occur, as a warehouse (S-1 or S-2) with areas accessible to the public (M), the minmum plumbing facilities will be determined based upon actual area of each occupancy by the Building Official. The total minimum fixtures shall be the addition of all fixtures required for each occupancy type.

This policy reflects current practice and may be superceded by future updates that will be published as is deemed necessary. The most current version copy will be posted on the Development Services home page on the worldwide web at www.sandiego.gov.